

10/07/2004

WITHHOLDING TAX FORM 40ES SCANLINE INFORMATION

FONT USED: OCR A (optical character recognition)

LOCATION ON FORM:

1. Distance from bottom - .25 inches
2. Distance from leading edge (**RIGHT SIDE**) - 2.25 inches
This is where the last check digit is placed.
3. Clear area surrounding Scanline - .25 inches

FORMAT OF SCANLINE:

TTTTPPPPPPPPSSSSSSSSSSBBBBBBEEEEEEEC XXXXXXXXD

Where: TTTT = tax type
 PPPPPPPPP = primary social security number
 SSSSSSSSS = secondary social number
 BBBBBB = begin date for calendar/fiscal year
 EEEEEEE = ending date for calendar/fiscal year
 C = 1st check digit

 XXXXXXXX = name conversion
 D = 2nd check digit for complete scanline
 not including space prior to name conversion

Field	Char.position	type	description
TTTT	1 - 4	numeric	7485 is tax type
PPPPPPPPPP	5 - 13	numeric	taxpayer SSN
SSSSSSSSSS	14 - 22	numeric	spouse SSN
BBBBBB	23 - 28	MMDDYY	begin period covered
EEEEEE	29 - 34	MMDDYY	end period covered
C	35	numeric	check digit for account

This check digit(position 35) is computed using the Modulus 10 (MOD 10) Luhn's method weighted 1,2,1,2, etc, applying the weights left-to-right to digits 1 through 34.

space	36 - 36	Space	space
XXXXXXXX	37 - 44	numeric	refer to table
D	45	numeric	check digit for all

This check digit(position 45) is computed using the Modulus 11 (Mod 11) Luhn's method. Multiply the digits in the field by the weights (...4,3,2,9,8,7,6,5,4,3,2), applying the weights right-to-left from the weight table to digits 1 through 35, skipping the space between

information, digits 37 through 44. No weight is applied to the check digit, and it is not used in the calculation. Add the resulting products by summing the products.

Sample used in illustration:

Period covered - March 2000

Tax type - 7485

Primary SSN - 123456789

Spouse SSN - 987654321

Period begin - 010100

Period end - 123100

Name - Smith

Scanline at this point: 7485123456789987654321010100123100

MODULUS 10 LUHNS -

The following is an example of the calculation of the first check digit based on the scanline at this point.

1	x	7	=		=	7
2	x	4	=		=	8
1	x	8	=		=	8
2	x	5	=	1 + 0	=	1
1	x	1	=		=	1
2	x	2	=		=	4
1	x	3	=		=	3
2	x	4	=		=	8
1	x	5	=		=	5
2	x	6	=	1 + 2	=	3
1	x	7	=		=	7
2	x	8	=	1 + 6	=	7
1	x	9	=		=	9
2	x	9	=	1 + 8	=	9
1	x	8	=		=	8
2	x	7	=	1 + 4	=	5
1	x	6	=		=	6
2	x	5	=	1 + 0	=	1
1	x	4	=		=	4
2	x	3	=		=	6
1	x	2	=		=	2
2	x	1	=		=	2
1	x	0	=		=	0
2	x	1	=		=	2
1	x	0	=		=	0
2	x	1	=		=	2
1	x	0	=		=	0
2	x	0	=		=	0
1	x	1	=		=	1
2	x	2	=		=	4
1	x	3	=		=	3
2	x	1	=		=	2
1	x	0	=		=	0
2	x	0	=		=	0

SUM = 128

Divide **SUM** by 10.

128/10 = 12 remainder 8

NOTE: If the remainder is zero, the check digit is zero.

Subtract remainder from 10.

10 - 8 = 2

THE CHECK DIGIT IS 2

Scanline at this point: 74851234567899876543210101001231002

The following is an example of the calculation of the second check digit based on the scanline and converted name of Smith.

4 x 7 = 28
3 x 4 = 12
2 x 8 = 16
9 x 5 = 45
8 x 1 = 08
7 x 2 = 14
6 x 3 = 18
5 x 4 = 20
4 x 5 = 20
3 x 6 = 18
2 x 7 = 14
9 x 8 = 81
8 x 9 = 72
7 x 9 = 63
6 x 8 = 48
5 x 7 = 35
4 x 6 = 24
3 x 5 = 15
2 x 4 = 08
9 x 3 = 27
8 x 2 = 16
7 x 1 = 01
6 x 0 = 00
5 x 1 = 05
4 x 0 = 00
3 x 1 = 03
2 x 0 = 00
9 x 0 = 00
8 x 1 = 08
7 x 2 = 14
6 x 3 = 18
5 x 1 = 05
4 x 0 = 00
3 x 0 = 00
2 x 2 = 04
9 x 8 = 72
8 x 3 = 24
7 x 7 = 49
6 x 7 = 42
5 x 7 = 35
4 x 3 = 12
3 x 8 = 24
2 x 4 = 08

SUM = 926

Divide **SUM** by 11.

926/11 = 84 remainder 2

Subtract remainder from 11.

11 - 2 = 9

NOTE: If the remainder is zero or one, the check digit is zero.

THE CHECK DIGIT IS 9

Scanline at this point:74851234567899876543210101001231002 837773849

NAME CONVERSION: Table used to convert the first four characters of the last name to numeric format.

0 = 48	A = 65	K = 75	U = 85
1 = 49	B = 66	L = 76	V = 86
2 = 50	C = 67	M = 77	W = 87
3 = 51	D = 68	N = 78	X = 88
4 = 52	E = 69	O = 79	Y = 89
5 = 53	F = 70	P = 80	Z = 90
6 = 54	G = 71	Q = 81	
7 = 55	H = 72	R = 82	
8 = 56	I = 73	S = 83	
9 = 57	J = 74	T = 84	

space	= 32
!	= 33
"	= 34
#	= 35
\$	= 36
%	= 37
&	= 38
'	= 39
*	= 42
+	= 43
-	= 45
?	= 63

NOTE: An undetermined value is 32.

Examples:

Smith 83777384

Doe 68796932

O'Reilly 79398269